MP Series (Mill Duty LVDT)

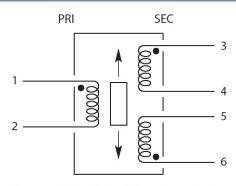
The MP Series of LVDT is suitable for use in harsh industrial applications. LVDT coils are epoxy encapsulated and encased in an anodized, extruded aluminum housing, proving a high level of mechanical integrity as well as protection against EMI and RFI. A heavy-duty terminal strip replaces lead wires, simplifying electrical connection. A standard Teflon® bore liner provides a bearing surface for the core while reducing diametrical clearance within the bore.



FEATURES

- **Epoxy Encapsulation Guards** Against Harsh Industrial Conditions
- Mounting Flanges for Easy Installation
- Screw Terminal Wiring
- Calibration Certificate Supplied with Each LVDT
- Compatible with all Schaevitz Signal Conditioners

wiring



Connect (4) to (5) for differential output

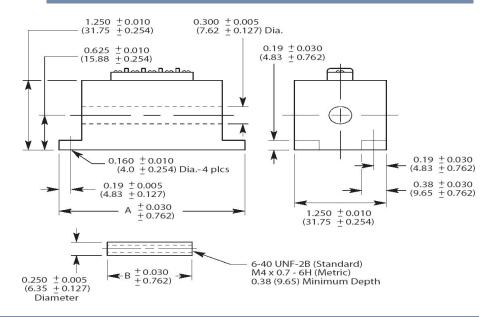
APPLICATIONS

- Rolling Mills
- **Power Turbines**
- Paper Mill Head Boxes

OPTIONS

- 5.0 kHz Excitation Frequency Testing*
- Metric Thread Core
- Small Diameter/Low Mass Core

dimensions



MP Series Rev 1

www.meas-spec.com

09/19/2008



Specifications

Input Voltage

Frequency Range Operating Temperature Range Null Voltage Shock Survival Vibration Tolerance Coil Form Material Outer Housing Material Inner Housing Material **Electrical Termination**

3 V rms (nominal)

400 Hz to 5kHz -65F to 300F (-55C to 150C) <0.5% full scale output 1,000 g for 11 msec 20 g up to 2 kHz High Density, glass-filled Polymer Anodized aluminum AISI 400 Series Stainless Steel 6-Terminal Barrier Strip

Electrical

MP Series Model	Nominal Linear Range		Linearity				Sensitivity		Impedance (Ohms)		Phase Shift	
Number	Inches	mm	50	100	125	150	0.001 in	Mm	Pri	Sec	Degrees	
500 MP	±0.500	±12.70	0.15	0.25	0.35	0.75	0.7	25.6	460	375	-1	
1000 MP	±1.00	±25.4	0.25	0.25	1.00	1.30*	0.39	14.2	460	320	-3	
2000 MP	±2.00	±50.8	0.25	0.25	0.50*	1.00*	0.23	8.3	330	330	+5	
3000 MP	±3.00	±76.2	0.15	0.25	0.50*	1.00*	0.25	9.1	315	830	+11	
4000 MP	±4.00	±101.6	0.15	0.25	0.60*	1.00*	0.20	7.1	275	550	+1	
5000 MP	±5.00	±127.0	0.15	0.25	1.00*	n/v	0.14	5.5	310	400	+3	
10000 MP	±10.0	±254	0.15	0.25	1.00*	n/r	0.07	2.8	550	750	-5	

Note: * indicates special reduced length core required. Please consult factory for additional information.

Mechanical

MP Series Model		V	/eight			Dimensions				
Number	Body		Core		A (Body)			B (Core)		
	Oz	Gm	Oz	Gm	In	Mm	in	Mm		
500 MP	12.36	350	0.64	18	6.50	165.1	3.45	87.6		
1000 MP	16.59	470	0.74	21	7.64	194.1	4.00	101.6		
2000 MP	21.00	595	0.95	27	11.01	279.7	5.30	134.6		
3000 MP	26.12	740	0.99	28	13.85	351.8	5.60	142.2		
4000 MP	31.77	900	1.27	36	16.68	423.7	7.00	177.8		
5000 MP	36.18	1025	1.27	36	18.92	480.6	7.00	177.8		
10000 MP	60.89	1725	1.52	43	31.90	810.3	8.50	215.9		

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ordering information	MP IIIodei	options				
Specify the MP Model followed by the	500 MP	Number Description				
desired option number(s) added together.	1000 MP	002 5.0 kHz Linearity Test ¹				
, , , ,	2000 MP	006 Metric Thread Core				
Ordering Example:	3000 MP	020 Small Diameter/Low Mass Core ²				
Model Number 500MP-008 is an MP	4000 MP					
Series LVDT with a ±0.500-Inch range	5000 MP	¹ Available on model 500 MP only				
(500 MP), with 5 kHz testing (002), Metric	10000 MP		² Consult factory for mass, dimensions and thread size			
thread core (006).		, t, t, t				

MP Series Rev 1 09/19/2008 www.meas-spec.com